

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A zoom lens unit for forming a subject image on an image pick-up device, comprising:

a stationary part;

first and second movable parts configured to reciprocate in predetermined directions guided by the stationary part, each movable part having held electrodes formed thereon and supporting a lens, at least one of the held electrodes configured to hold the movable part;

wherein the stationary part comprises:

a driving electrode substrate having a plurality of groups of driving electrodes formed thereon in a predetermined direction at a constant pitch to drive the first and second movable parts;

a holding electrode unit having a pair of holding electrodes corresponding to the held electrodes of the first and second movable parts to selectively attract and hold the first and second movable parts; and

a drive control circuit for sequentially energizing the groups of the driving electrodes of the driving electrode substrate as well as for selectively energizing the holding electrodes of the holding electrode unit,

wherein the drive control circuit executes a cycle at least once while at least one of the first and second movable parts moves one pitch of a driving electrode of the plurality of groups of driving electrodes when the first and second movable parts are moved in a different direction,

wherein the cycle comprises:

a first operation for simultaneously grounding the held electrodes of the first movable part and the holding electrodes of the holding electrode unit corresponding to the held

electrodes as well as attracting the first movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes;

a second operation executed just after the first operation to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit;

a third operation executed just after the second operation to simultaneously ground the held electrodes of the second movable part and the holding electrodes of the holding electrode unit corresponding to the held electrodes as well as to attract the second movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes; and

a fourth operation executed just after the third operation to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit.

Claim 2 (Previously Presented): A zoom lens unit for forming a subject image on an image pick-up device, comprising:

a stationary part;

first and second movable parts configured to reciprocate in predetermined directions guided by the stationary part, each movable part having held electrodes formed thereon and supporting a lens, at least one of the held electrodes configured to hold the movable part;

wherein the stationary part comprises:

a driving electrode substrate having a plurality of groups of driving electrodes formed thereon in a predetermined direction at a constant pitch to drive the first and second movable parts;

a holding electrode unit having a pair of holding electrodes corresponding to the held electrodes of the first and second movable parts to selectively attract and hold the first and second movable parts; and

a drive control circuit for sequentially energizing the groups of the driving electrodes of the driving electrode substrate as well as for selectively energizing the holding electrodes of the holding electrode unit,

wherein the drive control circuit executes a cycle at least once while at least one of the first and second movable parts moves one pitch of a driving electrode of the plurality of groups of driving electrodes when the first and second movable parts are moved in a different direction,

wherein the cycle comprises:

a first operation for simultaneously grounding the held electrodes of the first movable part and the holding electrodes of the holding electrode unit corresponding to the held electrodes as well as attracting the first movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes;

a second operation executed just after the first operation to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit;

a third operation executed just after the second operation to simultaneously ground the held electrodes of the first movable part and the holding electrodes of the holding electrode unit corresponding to the held electrodes as well as to attract the first movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes; and

a fourth operation executed just after the third operation to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit.

Claim 3 (Previously Presented): A method of driving a zoom lens unit comprising:

a step of executing a cycle at least once while at least one of a first movable part and a second movable part moves one pitch of a driving electrode of a plurality of groups of driving electrodes,

wherein the cycle comprises:

a first step for simultaneously grounding held electrodes of the first movable part and holding electrodes of a holding electrode unit corresponding to the held electrodes as well as attracting the first movable part to a driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes;

a second step executed just after the first step to energize the holding electrodes and the held electrodes such that the first and second movable parts are attracted to a pair of holding electrodes of the holding electrode unit;

a third step executed just after the second step to simultaneously ground the held electrodes of the second movable part and the holding electrodes of the holding electrode unit corresponding to the held electrodes as well as to attract the second movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes; and

a fourth step executed just after the third step to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit,

wherein a stationary part, which causes the first and second movable parts each holding a lens to execute a zoom operation by guiding the first and second movable parts so as to reciprocate in a predetermined direction as well as by driving them in a different direction, comprises:

the driving electrode substrate having the plurality of groups of driving electrodes formed thereon in a predetermined direction at a constant pitch to drive the first and second movable parts; and

the holding electrode unit having the pair of holding electrodes corresponding to the held electrodes of the first and second movable parts to selectively attract and hold the first and second movable parts.

Claim 4 (Previously Presented): A method of driving a zoom lens unit comprising:

a step of executing a cycle at least once while at least one of a first movable part and a second movable part moves one pitch of a driving electrode of a plurality of groups of driving electrodes,

wherein the cycle comprises:

a first step for simultaneously grounding held electrodes of the first movable part and holding electrodes of a holding electrode unit corresponding to the held electrodes as well as attracting the first movable part to a driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes;

a second step executed just after the first step to energize the holding electrodes and the held electrodes such that the first and second movable parts are attracted to a pair of holding electrodes of the holding electrode unit;

a third step executed just after the second step to simultaneously ground the held electrodes of the first movable part and the holding electrodes of the holding electrode unit

corresponding to the held electrodes as well as to attract the first movable part to the driving electrode substrate by energizing at least one group of the driving electrodes of the plurality of groups of driving electrodes; and

a fourth step executed just after the third step to energize ones of the holding electrodes and the held electrodes such that the first and second movable parts are attracted to the pair of holding electrodes of the holding electrode unit,

wherein a stationary part, which causes the first and second movable parts each holding a lens to execute a zoom operation by guiding the first and second movable parts so as to reciprocate in a predetermined direction as well as by driving them in a different direction, comprises:

the driving electrode substrate having the plurality of groups of driving electrodes formed thereon in a predetermined direction at a constant pitch to drive the first and second movable parts; and

the holding electrode unit having the pair of holding electrodes corresponding to the held electrodes of the first and second movable parts to selectively attract and hold the first and second movable parts.